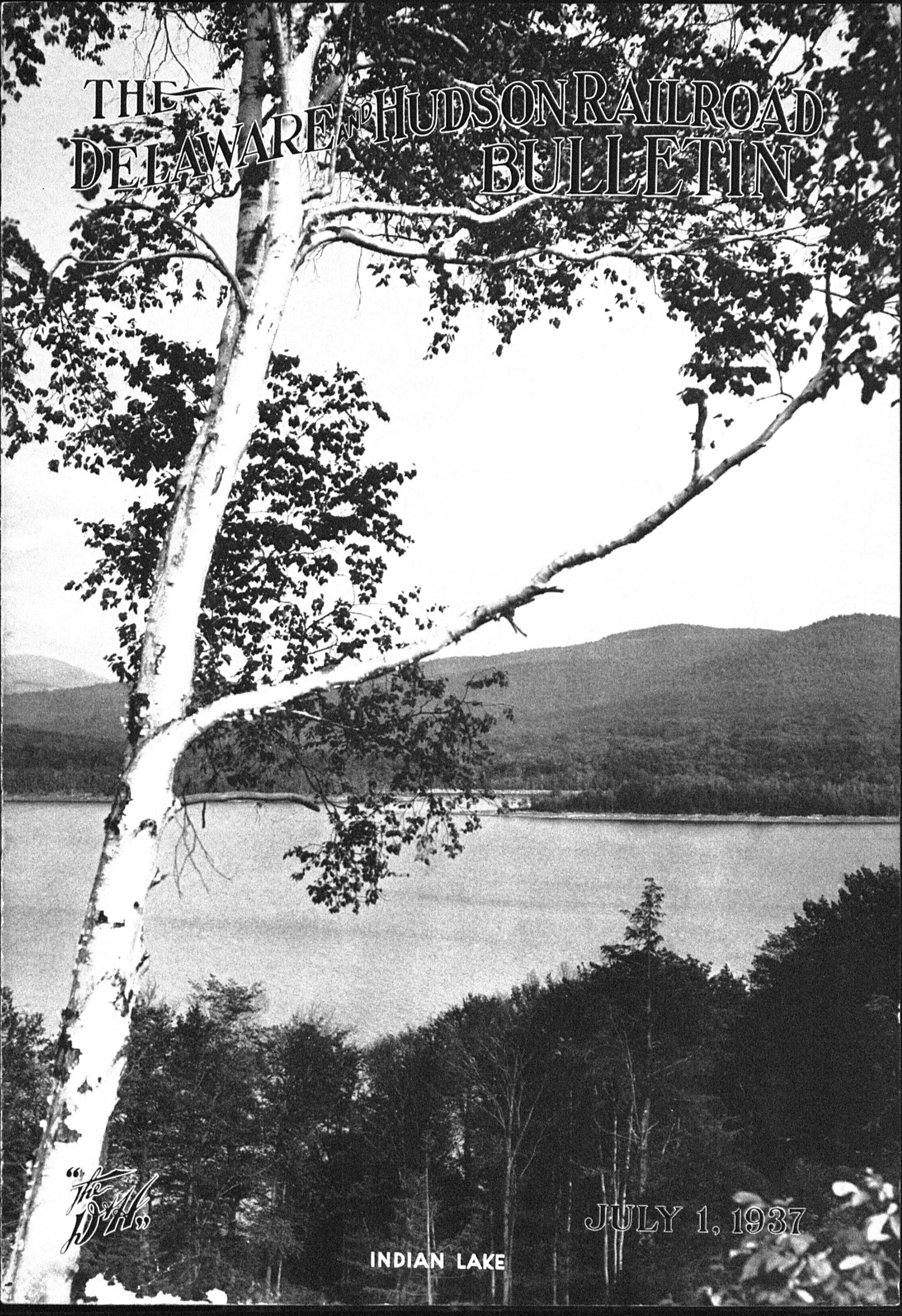
THE DELAWARE AND HUDSON RAILROAD BULLETIN



"The D&H"

JULY 1, 1937

INDIAN LAKE

Experience

I LEARN, as the years roll onward and leave the past behind,
That much I have counted sorrow but proves that the world is kind:
That many a flower I longed for had a hidden thorn of pain,
And many a rugged bypath led to fields of ripened grain.

The clouds but cover the sunshine, they cannot banish the sun,
And the earth shines out the brighter when the weary rain is done.
We stand in the deepest sorrow to see the clearest light,
And often from wrong's own darkness comes the very strength of right.

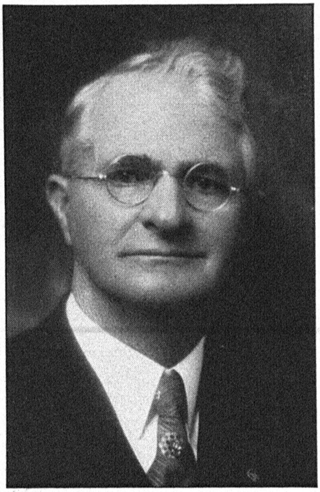
So, the heart from the hardest trial gains the purest joy of all,
And from lips that have tasted sadness, the sweetest songs will fall.
For as peace comes after suffering, and love is reward of pain,
So after earth comes heaven, and out of our loss the gain.

—AUTHOR UNKNOWN.

"the D&H" The DELAWARE AND HUDSON RAILROAD CORPORATION BULLETIN "the D&H"

Rode Locomotives 1,556,407 Miles

Retired Engineer Has Complete Record of Half Century's Service



FRANK A. YOKEY

IN his 50-year railroading career retired ENGINEER FRANK A. YOKEY fired and drove Delaware and Hudson locomotives a total of 1,556,407 miles, an average of 31,128 miles per year, his greatest annual mileage having been the 43,659 accumulated in 1927. He can make this positive statement because, beginning with his first trip with Engineer Michael Carroll, on No. 82, December 6, 1887, he kept a record in four huge volumes of every run he made, listing the date, train, engine, miles, pay, engineer or fireman, conductor, terminals, and times of arrival and departure. At the end of each year he computed his total hours worked, earnings, and mileage, setting these data down in the books with all the care of the most methodical bookeeper.

MR. YOKEY sampled a wide variety of occupations before finally entering railroading. Shortly after his birth at Lee, Oneida County, N. Y., September 21, 1866, his family moved to West Lyden, his father operating a stagecoach line between that place and Rome. Some of MR. YOKEY'S earliest recollections concern the stages, drawn by two or four horses, careening over rough, rutted roads with their loads of passengers, mail and express. One winter, when snow made operation of the coaches impossible, the elder Yokey trudged cross country on snow shoes with the mail bag on his back every day for six weeks.

When his father died in 1873, FRANK, his mother and brother went to live with relatives in Lockport, N. Y., returning to Rome a year later where his mother plied her trade of tailoress and FRANK, although only eight years old, found work as "handy boy" in a fish pole and baseball bat factory. Baseball, invented by General Abner Doubleday, who laid out the first diamond at Cooperstown, N. Y., in 1839, had gained great popularity by the seventies and the factory in which FRANK worked turned out great quantities of bats. The plant's principal line was three-section bamboo fish poles, although they did a wide variety of lathe work too.

In 1877, at the age of 11, FRANK was apprenticed to Bingham's Harness Factory, in Rome, working six days a week from 7 A. M. until 12 and 1 to 6 P. M. for $3.00. By the time he was fourteen FRANK had become so proficient at the business that he did all the stitching on the single-strap harness which won first prize at the State

Fair, held that year at Utica. Moving to Earlville, a village bisected by the Madison-Chenango County line, parts of which also lay in four townships, FRANK stitched the harness which won first prize in the Madison County Fair. Later on, while employed in Boardman's Harness Shop, in Oneonta, he took the first prize award at the Oneonta Fair. These harnesses were all hand sewn with waxed thread and an awl, the stitches being spaced 22 to the inch.

FRANK might have continued as an expert harness-maker had illness not forced him to seek outdoor work, a requirement which was filled by a job driving a horse-drawn bus for the Central Hotel, which then stood on the present site of the Oneonta Hotel.

In January 1886, FRANK went to work for the Phoenix Bridge Company which was then repairing the ironwork on the Delaware and Hudson's Harpursville viaduct. When Samuel Thompson, the railroad's bridge master, brought his gang to Harpursville to replace the woodwork on the span, he hired FRANK as a carpenter, thus beginning his 51-year railroading career.

That fall, when the bridge force was reduced for the winter, FRANK was hired by Master Mechanic Thomas Howard as a prospective fireman, Mr. Howard giving him a letter addressed to all enginemen, instructing them to permit FRANK to ride their engines to learn the firemen's duties. After several trips over the road as a passenger in the cab, FRANK became a full-fledged fireman on December 6, 1887, when he fired Mogul pusher engine No. 82 from Schenectady to Delanson for Engineer Mike Carroll. FRANK remained on "The 82" for one year, making three 32-mile round trips daily.

Late in 1888, FRANK was sent to Oneonta to fire No. 221 on the rounds with Willard Hand, later working for Engineers M. J. Dimock and Charles Jones. For some time he fired the accommodation train which left Oneonta for Binghamton at 7:00 A. M. weekdays, arriving home again at 9:45 P. M.

Beginning in 1891, MR. YOKEY was occasionally called as emergency engineer, making his first trip on Engine 160 from Oneonta to Mohawk and return with CONDUCTOR H. S. WILBUR, now retired and living at Cooperstown. By 1895 he was a regular engineer working "on the rounds"—running both freight and passenger trains from Oneonta to any of the four other terminals on the division. At that time engineers received one day's pay for a round trip to Nineveh, 1⅛ days for going to Delanson and back, 1¼ days on a Binghamton run, and 2 days for a round trip to Albany.

Superintendent C. D. Hammond sent MR. YOKEY to Albany to work on April 7, 1898, and he has made his home in the Capital City ever since. Most of his work as extra engineer was in passenger service until June 4, 1906, when he became the regular engineer on the Albany-Oneonta way freight with Conductor Charles Flannigan, leaving Albany at 5:50 A. M., arriving at Oneonta at about 6 P. M., and starting for home the following morning at 7 A. M.

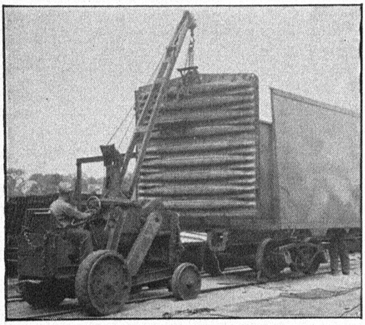
In October 1908, MR. YOKEY went to Central Bridge to run Locomotive 791 then stationed there to push freight trains south to the summit of the Richmondville Hill and up Esperance grade. The following February he took the Oneonta-Albany way freight run, working successively with Conductors Silvernail, Butts, and DELAMATER. In July 1910 he went on the pick-up and drop train with CONDUCTOR "JIMMY" VANDEUSEN, and his successors, Frank Streevel and FRED MILLER, remaining on that run until forced to take a leave of absence due to illness late in 1912.

Returning to work, he held the Albany-Colonie transfer job until "bumped," when he took Kenwood Yard switcher No. 53. During the following nine years he operated a switch engine in Schenectady Yard with Conductor Terrance H. Burns, the Albany-Cobleskill way freight with CONDUCTOR MERRILL SHEPARD, Albany-Altamont locals with MARTIN STAPLETON, FRED MILLER, and Henry Gilroy, a Kenwood switch engine with Frank Long, and Trains 302 and 305 with "JACK" KEARNEY.

For eight years, beginning December 8, 1922, MR. YOKEY pulled the "short milk" train, which did all the freight and milk switching between Delanson and Cobleskill. In 1930 he took the "long milk's" pusher, assisting Train 318 from Albany to East Worcester daily, working on alternate days with CONDUCTORS P. J. CONNORS and "JACK" KEARNEY. Two years later, in October, 1932, MR. YOKEY returned to Kenwood Yard to operate the day switcher, the job he held at the time of his retirement on pension March 1, 1937.

MR. and Mrs. YOKEY have just returned from an 8,000-mile rail trip to California, going west over the southern route and back through the north. They enjoyed their stay in California so much that they are seriously considering selling their Albany residence at 11 Austin Avenue and making their permanent home on the West Coast.

MR. YOKEY is a charter member of The Delaware and Hudson Veterans' Association, he has been a Mason since 1908, has belonged to the Oneonta Lodge of Odd Fellows for 47 years, and has been a member of the Brotherhood of Locomotive Firemen and Enginemen since Christmas Day 1887.



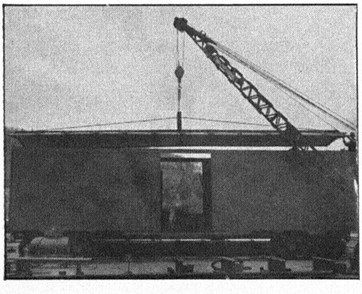
Applying Welded Steel End

Steel Box Cars
from
Pre-fabricated Units
joined by
Arc-Welding

THE first of a series of 25 welded, steel box cars, embodying several features of design and construction which are new in car building, recently rolled out of the Oneonta Car Shops to enter revenue freight service. Others will follow at weekly intervals until the order is completed. All will be of 80,000-pound capacity (3,318 cubic feet), meeting all Association of American Railroads requirements.

Aside from the wooden floor, inside lining, lining nailers, and running boards, the cars are built entirely of steel, the sides, ends, and underframes being arc-welded. The roof is also secured to the car by welding.

Construction is being done under a "spot" system. Various early erecting operations are carried on simultaneously at different, although closely spaced locations. When the car has finally taken form, it moves to other "spots" for the application of woodwork, which includes the floor and lining, and final painting.



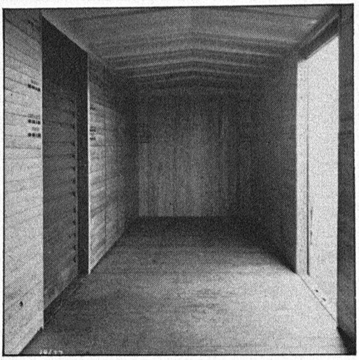
Roof is Applied as a Unit

The cast steel side frame trucks of integral type are assembled at the regular truck station. They are placed on the erection track by a crawler crane and are spaced to receive the underframe when it is completed.

Arc-Welding Reduces Weight

Fabrication of the underframe begins with the placing of two "Z"-bar section center sills on a specially designed jig. The sills are lined up and locked in position by a system of clamps and wedges, after which the front and back draft stops and center sill fillers are welded in place. The other parts which go to make up the assembly, such as coupler yokes, draft gears, carrier irons, bolsters, cross bearers, and center plates are lined up with gauges and secured in place.

In order to overcome the difficulty experienced in making electric welds overhead, a jig was built which permits the complete rotation of the under-



Interior of Car

frame and by so rotating all welds can be made "down welds."

When completed, the underframe is removed from the jig by a crane and is set on the trucks. A welded car side, which is pre-fabricated when purchased by the company, is picked up by the crane and held in position on the underframe while fit-up bolts and stays are applied. The other side is then placed in position in the same manner.

Next come the welded ends, which are bought in two sections, top and bottom, and are arc-welded together on a jig of the proper dimensions. End grab handles, ladders, brake step and brackets, hand brake and running board brackets are riveted on.

Riveting or bolting of these parts, rather than welding, is specified by law. Two completed ends are then lifted into position and secured to the sides by fit-up bolts.

The 12-section roof is likewise assembled in one piece on another jig before application to the car. Running board saddles, steel members to which the running board will later be bolted, are placed over the seam caps along the center line of the roof. The sections are joined and the running board saddles and carlins are secured by ⅜-inch rivets which are applied with a pneumatic yoke riveter. Two men do the riveting: one attends the forge and inserts the rivets in the holes; his partner operates the machine.

When the roof assembly is completed, the running board is bolted on and another ingenious jig is used to lift the roof on top of the car. This device consists of a steel beam of the approximate length and width of the running board, with a row of closely spaced hooks along one side which are slid under one edge of the running board at the saddles. On the other side of the beam is a row of hooks which can be moved laterally a sufficient distance to clear the running board and are then snapped under the latter by springs. With this "kink" the entire roof is hoisted into position and secured with fit-up bolts preparatory to welding to the sides and ends.

The "AB" air brake reservoir, cylinder, and lever fulcrums are then applied. Meanwhile, the door track, stops, and guards have been placed, and the doors hung.

The interior of the car is then spray-painted with red lead, except the roof which receives a coat of special gray galvanized iron preservative.

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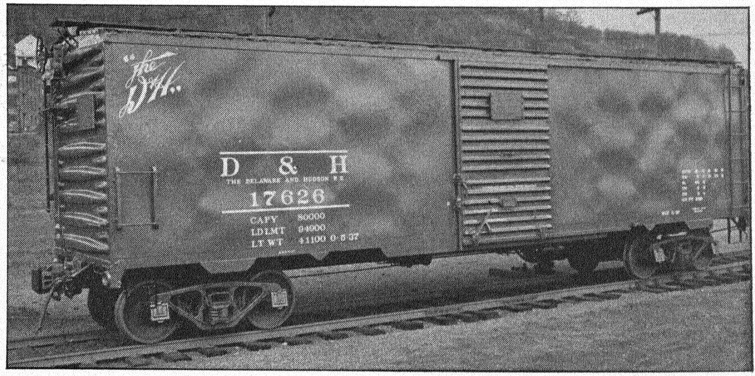
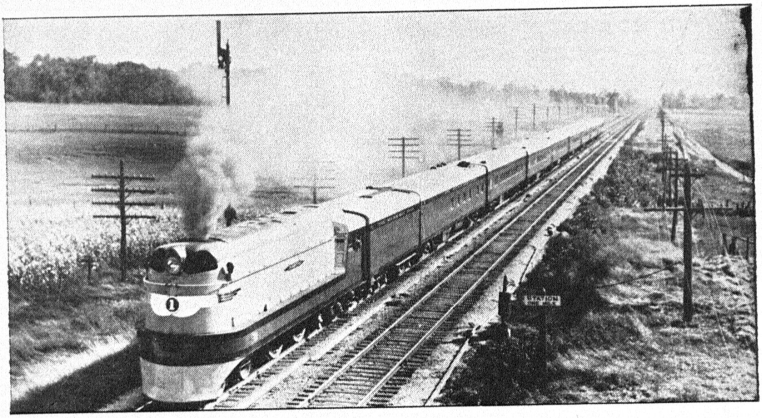




"Hiawatha"

Thorougbreds of the Rails

Schenectady Plant's "Iron Horses" Have Earned World-wide Renown

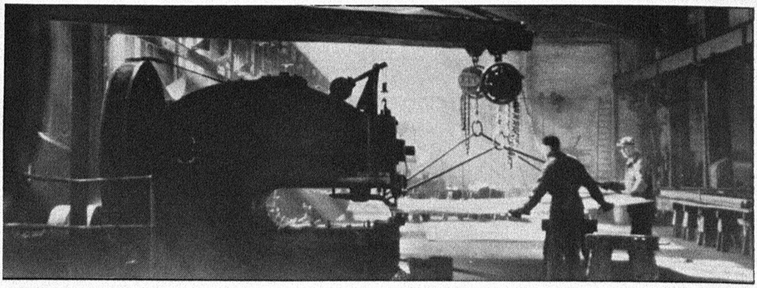
FROM New York to Shanghai, from Alaska to the Cape of Good Hope, steam locomotives have carried the name and fame of Schenectady during the past three-quarters of a century. Lounging in the comfort of a train gliding along at from 60 to 100 or more miles an hour, the traveler can guess that his progress is made possible by these mighty products of the American Locomotive Company, and the chances are about even that he will be right. In fact, in one recent year, 100 per cent of the steam locomotives built in the United States rolled out of this yard, for the Delaware and Hudson—the only one built in 1933, in a plant which, a quarter of a century earlier turned out 930 in a single year!

Just to walk through the buildings of the locomotive works without stopping to study what is going on around you takes the biggest part of a day. A complete article, several of them, could be written about any one of the departments, for instance, the boiler shop, forge shop, laboratory, wheel shop, rod shop or a dozen others.

To attempt to describe to railroad readers the details of rolling up barrel courses, wrapper-sheets and smoke arches, the flanging and drilling of flue sheets, the assembling of boiler components for riveting on the "bull ring" is but a recital of what goes on in the "back shop" at Colonie in the daily routine. The difference is that at Schenectady they are numbered by the dozens, or perhaps hundreds, and production is carried out on a much larger scale.

Likewise the forge shop's great furnaces produce hundreds of glowing billets which, under the great steam hammers are brought roughly to the shape of side rods, draw bars, motion-work, axles, crank pins, or frame bolts, and countless other parts. From the foundry come driving wheel centers and numerous other castings, though the great steel frames, the "backbone" of the locomotive, are obtained from outside sources as are air compressors, feedwater heaters and pumps, gauges and other accessories.

Before the forgings start through the machine shop, test sections which have been cut off at random are sent to the laboratory, a four-story building containing chemical and physical testing apparatus, also office facilities for the convenience of the inspectors who are sent to the plant by locomotive purchasers to see that materials and workmanship conform to desired standards. Scarcely have the forgings had time to cool when complete information as to their chemical analysis, tensile strength and other qualities is available to



Punching Rivet Holes in Boiler Plate

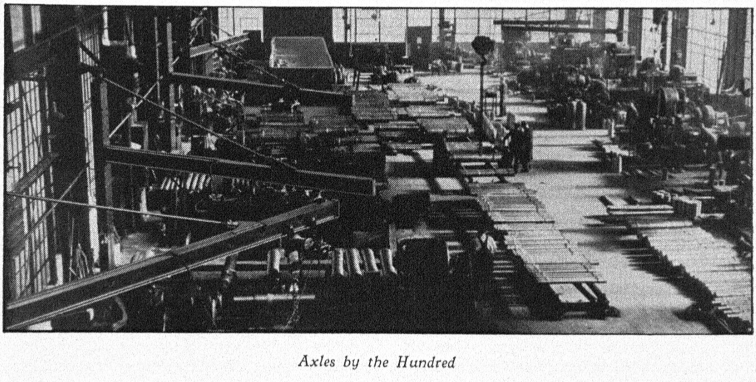
the inspector, who thereupon accepts or rejects the material represented by the specimens tested.

Accepted forgings for crank pins, axles, etc., move by railroad to the shop where they are turned and ground to size. The Locomotive Company operates its own inter-shop rail system, a number of locomotives and cars being required to handle material and parts, finished boilers moving from the boiler shop to the erecting shop and the like.

Similarly, forgings for driving rods move to the rod shop where, to the layman, miracles are worked, for there is little resemblance between the chunks of blue-black stuff going in at one end of the shop and the smooth, gracefully contoured, silvery bright pieces passing the final inspector's watchful eye. In a side bay, screw machines and turret lathes are turning out mounds of studs and bolts. The trend toward unit construction has greatly reduced the number of parts in the modern locomotive, though some 7,500 are still required.

Parallel to the rod shop is the wheel shop where driving axle boxes are bored and fitted to the journals and the frame jaws, tires are shrunk on the wheel centers and turned to size, crank pins fitted and everything assembled so that complete sets of wheels are ready to roll through a doorway opening into that bee hive of activity, the erecting shop.

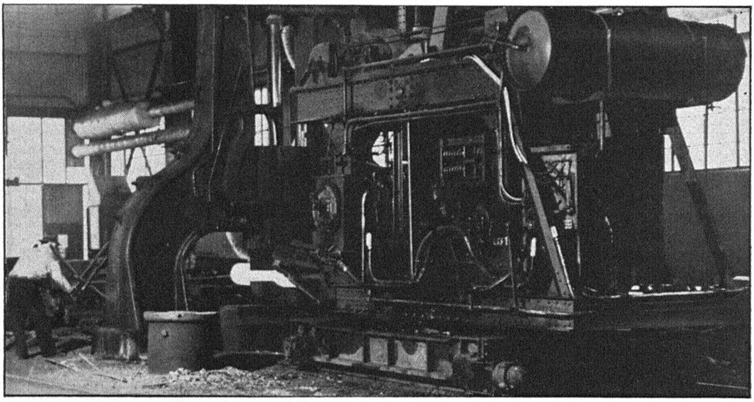
Practically surrounded by the various shops producing the parts which, when assembled, form a locomotive, is the erecting shop. It is divided into two bays in each of which are tracks and pits permitting the simultaneous erection of a score of locomotives. In the second bay is a row of boilers, newly arrived from the boiler shop. Swarms of men drill holes and drive studs for the brackets



Axles by the Hundred

which are to support the cab, running boards and other apparatus. Through the fire-door opening of one comes a flickering, bluish glare as an electric welder seals the flues in the flue sheet. At one end of the bay a set of frames is being assembled and prepared to receive the boiler.

In the next bay, boilers and frames have been swung through the air by great overhead cranes and set down on the driving wheels, one main pair of which revolves on a set of power-driven rollers as machinists adjust the setting of the valves. The cab, with its side panels protected from marring by wooden guards, is lowered in place and jacket men are slipping a sleek covering over the lagging which covers the boiler barrel.



Forging Axle from Steel Billet

Then into the "running shed." Here the tenders, completed in the "tank shop," are coupled on. Pipe fitters make everything from quarter-inch copper tubing to 3-inch pipes to go through all manner of contortions as they carry steam, water, oil, air or sand through, over or under the great mechanism. The finished touches are applied and final adjustments made after the tank and boiler have been filled, the engine fired up and run up and down the test track a few trips. The four tracks of the running shed will accommodate a dozen of the largest locomotives in the world. From this shed have gone forth "Hiawatha" type engines for the Milwaukee, the great 4-12-2 "Union" type monsters of the Union Pacific, also the "Yellowstone" Mallets of the Great Northern and many others including such of the Delaware and Hudson power as was not built in our own shops.

For many years locomotive building has been one of the two leading industries of Schenectady. In 1848 the Schenectady Locomotive Engine Manufactory was established, the Norris brothers, already established as locomotive builders in Philadelphia, being engaged to manage the enterprise. After one year's operation, during which one locomotive, the *Lightning*, was turned out, things went so badly that the stockholders, who had paid in some $40,000, took charge.

Out of the wrangling that ensued there emerged two men, John Ellis and Walter McQueen, the one a business genius and the other a grand mechanic. Ellis became the first president of the reorganized company and soon placed it on a sound financial footing. McQueen's engines were meanwhile making a name for themselves all over the country.

The first buildings of the company were located where the present machine shop stands. This was on Fonda Street, or what is now North Jay. Most of the work of locomotive building in the early days was done in the main building, which was about 400 feet long and 60 feet wide. This contained a machine shop, erecting shop and engine room on the first floor, and a machine shop for light work on the second floor; also in the north

(Continued on page 109)

The
Delaware and Hudson Railroad
CORPORATION
BULLETIN

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PUBLISHED MONTHLY by The Delaware and Hudson Railroad Corporation, for the information of the men who operate the railroad, in the belief that mutual understanding of the problems we all have to meet will help us to solve them for our mutual welfare.

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Vol. 17 July 1, 1937 No. 7

A light supper, a good night's sleep, and a fine morning have often made a hero of the same man, who, by indigestion, a restless night and a rainy morning would have proved a coward.

—CHESTERFIELD.

Food

NEWS dispatches recently reported the cheers with which refugees at the American embassy at Madrid greeted the arrival of 880 pounds of food from Valencia. Compared to the prospect of slow starvation, 880 pounds of food are untold riches. Yet it is insignificant beside the 70,000,000 pounds which enter New York City every week day on the average.

This latter figure is quoted by way of emphasizing the dependence of our modern centers of population on railroad transportation for their very existence. Allowing that much of this food arrives by truck, the bulk of it still has to travel too far too quickly to permit the use of highway transportation.

Take your breakfast this morning, for example. Your cereal, on the average, came 627 miles, by rail. If you had fresh berries with it, they came 1,200 miles, often by special train. Perhaps you started off with grapefruit or oranges which average no less than 1,125 miles in refrigerator cars. The butter for your roll or toast comes 927 miles by rail. Even the eggs which accompany your bacon came 1,353 miles by train so quickly that they compare favorably with what the local farmer peddles from door to door.

Yes, our living habits have changed greatly in the last decade, mostly for the better. Without our modern railroads we would have to forego many of what have now become the necessities of life, yet which we as children scarcely dreamed of. Certainly our diet would be much more limited in its variety. Calculate, if you will, the number of trucks and men needed to move 70,000,000 pounds of food into New York daily, estimating an average haul of, say, 500 miles, and then consider the needs of all the other centers of population, large and small. Add to this the materials needed for clothing, shelter, etc., and the size of the task performed daily by the railroads becomes more clearly evident.

Yet we take it all for granted, making no move to insure their continued operation in the face of attacks by various self-seeking groups.

Are You a Thoroughbred?

WHEN we say a man or a woman we know is a thoroughbred, we pay to him or her the greatest compliment of which we are capable. There is not in the vocabulary of pleasant terms a stronger word.

Visit a stock farm, the home of high-grade horses or cattle, and you will see that the physical signs of the thoroughbred are fine eyes and an erect bearing. These are the symbols of a high, generous spirit.

The keeper of the stock farm will tell you that a thoroughbred never whines. One illustrated this to me by swinging a dog around by his tail. The creature was in pain, but not a sound escaped from him. "You see," said the keeper, "they never complain. It ain't in 'em. Same way when a stable burns. It ain't the best horses that scream when they're burnin'. It's the worst."

All this is quite as true of the human thoroughbred. The visible signs of the invisible spirit are the eyes that are steady and shoulders that are straight. No burden except possibly the weight of many years bends his shoulders, and his eyes meet yours in honest fashion, because he neither fears, nor has been shamed at the bar of his own soul.

He never complains. He keeps his troubles to himself, having discovered, as thoroughbreds do, that to tell troubles is to multiply them, and to lock them in the breast is to diminish and finally end them. He never talks about what Fate has done to him. He knows he is a master of his own destiny. He never bewails the treatment he has received from another, for he knows no one can do him lasting harm except himself. — *Atlanta-Kiwanian.*

Not Generally Understood

LOST in a welter of propaganda, the average citizen has had little opportunity to find out some of the "facts of life" which are really of tremendous importance to every one of us, inasmuch as they have a close relation to governmental activities which we, as taxpayers, are financing, the extent of our interest becoming painfully evident every time we drive up to a gasoline pump and pay a tax of 50 cents on a purchase priced at $1.20 to $1.40 in these parts.

Originally based on the theory that the motorist was better able to pay taxes than those less fortunate, this impost has become a heavy burden on those who are least able to bear it, as is the case with practically all taxation. In the end all taxes are paid by the working man. A study recently completed by the Twentieth Century Fund of New York shows that, in that state, the wage earner who earns an average of $2,000 a year must pay from 14.2 to 17.2 of his income in taxes of all kinds, but his fellow worker who earns only half as much must pay from 15.4 to 17.6 per cent in taxes. Continuing on to the farmer, whose cash income comes to around $500 a year, taxes are found to absorb from 12 to 19.1 per cent of the amount received.

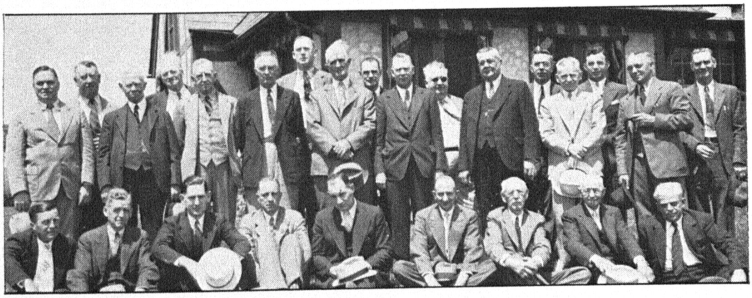
United States Treasury figures shed an interesting light on the shrinkage in income of our citizens since 1929. Perhaps you will find that you are better off than the average, despite reductions in income from various sources! The total national income has dropped 37 per cent. Meanwhile incomes under $5,000 have declined 30 per cent; those from $5,000 to $10,000, 51 per cent; and so on up to those who, with incomes of $100,000 or more, have had an 87 per cent "cut."

To the unthinking, this last statement might be cause for cheers. On the contrary, when wealthy people find their incomes thus reduced they are forced, just like corporations in the same circumstances, to reduce the sizeable group of employes required to keep up their real estate, automobiles or yachts. Thus any attempt to "soak the rich" eventually lands on the neck of the poor taxpayer.

Seemingly irrelevant, the question of generating electric power in government plants comes in here, because of its very important bearing on the taxes paid by residents of Delaware and Hudson territory. Amid the discussion of the Tennessee Valley project, one important fact is conspicuous by its absence: In that coal producing region electricity can be produced in a modern steam-powered plant at about two-thirds of what it costs to generate it by water-power developed today on the Tennessee River. (Not to mention the fact that the production of electrical energy in a steam plant gives employment to approximately ten times as many people per unit as does the use of water-power.)

Since the taxes collected in the State of New York form one-quarter of the total collected by the federal government, it follows that you, Mr. Taxpayer, are putting up 25 cents of every dollar that the folks down in Washington are spending by billions

Agents Meet at Howe Caverns, June 9, 1937



every year. More correctly speaking, you *will* pay in that proportion, for money has been and still is being spent twice as fast as anyone dares to attempt to get it from the taxpayers. Otherwise the federal government would not have been able to accumulate a debt of over 35 billions of dollars; your name is on the promissory note for that amount, though you may not realize it!

Despite all this there are still those among us who have the effrontery to advocate that the government should take over the ownership of the railways. Skipping a discussion of the effect of such a change on the efficiency and cost of transportation, the railroads paid about $240,000,000 in taxes last year. If the government "takes them over," not only will it have to raise this by some new taxes on the rest of us but it will also have to take from us, or our descendants, the 26 billion dollars which have been invested in the railroads' property (as of the end of 1935). To quote the *Norfolk (Va.) Times:* "Whenever we lose a substantial taxpayer the loss must be made up from some other source or our income suffers a material reduction. High taxes at the present time make it imperative that we retain our great family of taxpayers intact and not let any of the big ones get away. Government ownership of the ralroads would jeopardize our educational system for the schools would be deprived of one of their heaviest contributors."

At the risk of "scattering our shot" attention is called to another form of "tax-eating" which is having a very serious effect on the country at this time, offering a basis for the charge that we are rolling to ruin on rubber. No less an authority than Chairman Shirley of the Virginia State Highway Commisison points out the excessive amounts of taxpayers' money which are being put into "super" highways. For example: Between Richmond and Fredericksburg there are two main highways. One of them, of macadam construction and one of the best stretches of road in the state, according to Mr. Shirley, cost about $2,500 a mile to build. No buses or trucks are allowed upon it and it handles pleasure vehicle traffic in good shape. The other route, open to buses and trucks, had to be built of concrete to stand the battering of the heavy vehicles operating over a route provided at an expense to the taxpayers of over $30,000 per mile, or twelve times as much as the cost of building roads for non-commercial use.

Commercial carriers operating over the public highway systems pay in gasoline taxes and license fees only about 2 per cent of their operating costs. The railroads paid over 9 per cent of theirs, in addition to which they maintained and policed their rights of way at their own expense while truckers clamored for special protection at public expense. An effort by the Virginia Highway Commission to impose a tax of 5 per cent of operating costs on the truckers was opposed on the grounds that it would drive the truckers out of business. Mr. Shirley contends that such an operation as depends on a subsidy from the taxpayer as this does should be suspended.

When the taxpayers get sick of paying out their hard earned money to provide "cheap" transportation for somebody else it seems reasonable to hope for some relief from the constant pressure for more taxes. Of course this isn't the only way money is being wasted, in the sense that it is not being put to a good economic use in order to produce goods or services of value to the taxpayers in general. The idea is merely to focus attention on the fact that taxes can be cut, but only if spending is cut first!

Steel Box Cars

(Continued from page 102)

Moving to the woodwork "spot," the car floor and inside lining are applied, and the latitudinal running board is added.

The final construction step is the painting and stenciling of the car on the paint track. One coat of red lead and two of freight car brown are sprayed on the outside, while the inside lining is sprayed with enamel oil as a preservative. One-inch black lines show the levels to which the car should be loaded to carry its capacity in various grains, as well as the location of the lining nailers for the guidance of shippers in case load blocking is needed.

One of the main features in the construction of these cars is the complete absence of any heavy manual operations. The entire car is built in sections and, as brought out above, these sections are placed in position by a crawler-type crane.

All arc-welding necessary in the erecting operations is done by employes from the regular Car Department force.

Girl Wanted

She was interviewing an applicant for the position of cook.

"Well, Jane, you seem suitable in every respect, and I have decided to engage you. The work will be light, and you will find the master is very easily pleased."

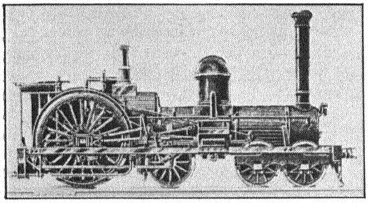
"Yes, mum," replied Jane, "I thought that the moment I saw you."

Thoroughbreds of the Rails

(Continued from page 105)

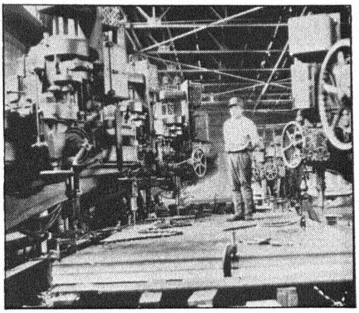
end of this building was a boiler shop and blacksmith shop. The offices occupied a small two-story brick building on the site of the present offices of the works.

The first locomotive built at Schenectady, already identified as the *Lightning*, weighed twelve tons. It was built for the Utica and Schenectady Railway. It had 16 by 22-inch cylinders, 7-foot driving wheels, and a boiler pressure of 120 pounds. The boiler was 42 inches in diameter with 116 2-inch tubes ten feet long. The heating surface was 670 square feet. This diminutive locomotive had a tractive power of 6,850 pounds and if in service today would haul approximately 450 tons.



"Lightning"

By contrasting the *Lightning* with the enormous Mallet locomotive built at the Schenectady Works for the Virginian Railway, the progress of 70 years of locomotive building is apparent. The *Lightning* with its 670 feet of heating surface has given place to a locomotive with 8,606 feet of heating surface and 2,120 square feet of super-heating surface. The little machine capable of exerting a tractive power of 6,800 pounds has been replaced by an enormous machine capable of exerting a corresponding force of 176,000 pounds. Whereas the *Lightning* would haul 450 tons, the Virginian Mallet has hauled a train of 17,600 tons.

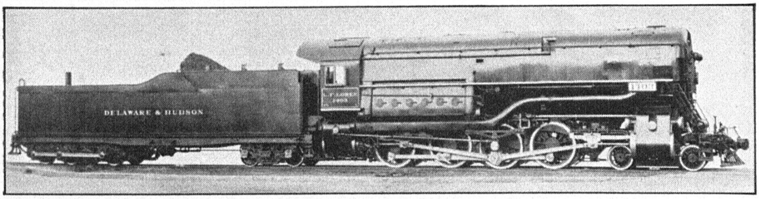


Drilling Boiler Plate

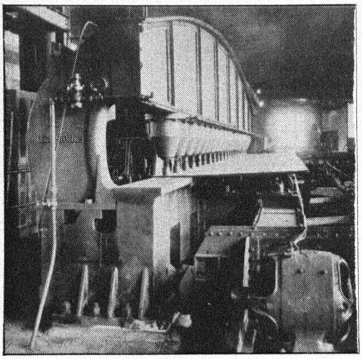
After the little locomotive plant at Schenectady had been idle for about a year, the company was reorganized on June 14, 1851, and came under the control and ownership of Mr. Ellis, already mentioned, Daniel D. Campbell, Simon C. Groot, and Sebastian Bradt. These men bought up the small holdings of those at first interested for a little more than one-half their original valuation and capitalized the new company at $60,000. The concern was given a new name, The Schenectady Locomotive Works, which it held until the time of its merger with the American Locomotive Company.

Mr. Ellis continued as president until his death, October 4, 1864, in his sixty-ninth year. By that time he had acquired by purchase nearly all the stock, which was subsequently divided among his sons, John C., Charles G., Edward, and William D., the remaining portion of the stock being owned at that time by Superintendent Walter McQueen.

On the night of June 26, 1866, a fire broke out near the north end of the second floor of the machine shop and consumed most of the main building. The building was soon rebuilt and considerably enlarged.



Only Steam Locomotive built in United States in 1933



Punching Tank Steel

It was not until the latter part of the eighties that there was any appreciable growth in the size of the plant. Since that time so rapid and radical have been the changes that every building that was standing forty years ago has either been rebuilt or torn town, with the single exception of the easterly portion of the main office building.

The oldest son, John C. Ellis, succeeded his father as president and served until June, 1878, when he retired. His death occurred October 4, 1884, exactly twenty years to a day after the death of his father.

The successor as president was the second son, Charles G., who most capably served until his death at the age of 48, on May 15, 1891, following a brief illness. It was during his administration that important changes in methods of manufacturing occurred at this works, whereby the gauge system of standard sizes was introduced for many details that had not previously been so made. Under his encouragement the works made a great success of this system.

Edward Ellis, the third son, followed Charles as president of the works and filled that position until the time of his death, February 27, 1897.

William D. Ellis had been treasurer since 1893, and succeeded Edward as president, being the fifth of the Ellis family to occupy the president's chair. He continued also in the office of treasurer. In this dual executive capacity he was ably supported by the vice-president and general manager, Mr. Albert J. Pitkin, both of them continuing in the same offices until the merger of the local works with seven other plants to form the American Locomotive Company, which was incorporated June 24, 1901, with a capitalization of $50,000,000.

While not the largest of the American Locomotive Company's plants, it's 75 acres being exceeded by the 118 of the Brooks works at Dunkirk, N. Y., and closely approximated by the 65 acres occupied by the Montreal unit, the Schenectady plant is of primary importance to the Delaware and Hudson by reason of being located on its main line.

Delaware and Hudson interest in the Dunkirk works was recently heightened by the construction there for this company of the world's first all-welded locomotive boiler, a description of which will appear in an early issue of *The Bulletin.*

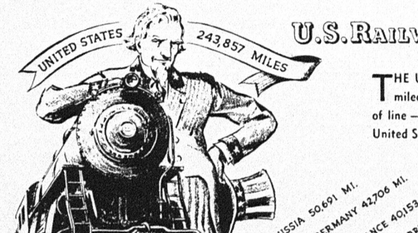
Indirect

"And now," asked the teacher, "will anyone give me an example of an indirect tax, please?"

"The dog tax," announced a pupil.

"Why do you term that an indirect tax?"

"Because the dog doesn't pay it."


UNITED STATES 243,857 MILES
RUSSIA 50,691 MI.
GERMANY 42,706 MI.
FRANCE 40,153 MI.
GREAT BRITAIN 23,383 MI.

U.S. RAILWAYS LEAD THE WORLD!

THE United States has 30 per cent of the total railway mileage in the world — 243,000 out of 818,000 miles of line — although the land area and the population of the United States are less than six per cent of the world's total!

An abundance of safe, fast, economical and dependable rail transportation has been, and always will be, an important factor in the growth and continued prosperity of the United States.

Clicks from the Rails

Travel by Rail

to avoid looking at an almost unbroken chain of billboards, hot dog stands, and cabins, is the advice of John O'Ren, writer of the "Down the Spillway" column in the *Chicago Journal of Commerce*. In addition to enjoying greater comfort, the train traveler sees more of the country than the motorist, despite the popular misconception that the way to see things is to travel by automobile.

✣

Bravery and Loyalty

of Pullman employes is exemplified in the action of Porter P. M. Wright whose car was derailed and rolled down a 15-foot embankment near Bentley, Iowa. Although a doctor discovered that he had two broken ribs, he refused to leave his car until some authorized person appeared to guard the Pullman equipment.

✣

The Fox and Hounds

have the right of way over all trains, including expresses, in England. At the recent meet of the Belvoir hounds, the fox crossed the railway tracks just as a London express approached. The train was stopped to allow the hunting party to pass. The fox escaped.

✣

South African Railways

have the largest mileage of electrified track in the British Empire. Within the next six months a total of 1,061 track miles or 556.5 route miles will have been electrified.

✣

The Highest Railway Bridge

in North America is believed to be the Southern Pacific's span over the Pecos River, in Texas. This structure is 330 feet high, 2,180 feet long, 16 feet wide, and was completed in 1892.

A Fire Alarm

was telegraphed 40 miles from Niles to Kalamazoo, Mich., in time to prevent a blaze in a house. A Chicago secretary, realizing that she had forgotten to turn off the curling iron in her sisters' house in Kalamazoo before leaving, dropped a note from her train as it sped through Niles. The message was promptly telegraphed to the agent at Kalamazoo who telephoned the fire department. Firemen found the iron wrapped in a smoking towel on a radiator.

✣

Asleep on the Floor

of the observation car of a transcontinental train, a British tourist was wakened by the Pullman conductor checking the train. The Briton explained that his bag had been in an upper berth but seeing no way of getting into it had decided the simplest solution of his problem was to make up a bed on the floor. The conductor rolled up his bedding, secured a ladder, and put the grateful traveler to bed.

✣

A Baby Was Left

behind by an absent-minded mother leaving Kalgoorlie station on the Australian Railways Great Western Express. The train was gathering speed when the alarm signal rang and the express ground to a stop. The frantic mother raced back to the waiting room to snatch her baby from the seat where he was still sitting contentedly and again boarded the train.

✣

A Practical Test

of the theory that lower freight rates produce more revenue was recently concluded in Poland. No increase in traffic having resulted from reductions which became effective in March 1936, the low rates then fixed cannot be maintained, even on a government-operated road as this is, and a 10 per cent increase has been necessary.

A Sail Car

was used occasionally on a railroad in England, in 1845. An ingenious retired sailor, living at Middlesbrough, regularly attended church at South Stockton, four miles away. As there were no Sunday trains on the railroad linking the two communities, he used to harness his horse to a railway car for the trip. However, when there was sufficient wind, blowing in a direction which would serve for the double journey, he rigged up a mast and lug sail and traveled by wind-power.

✣

A Fast Freight

was thundering across the Milwaukee's Mississippi River bridge when engineer Carmichael saw a frightened and half-frozen wire-haired terrier on the tracks. He stopped, took the dog back to the cab, and turned him over to the draw-tender who warmed, fed, and released the dog. Then, only a few minutes late, the fast freight sped on.

✣

High Boiler Pressure

is a feature of a passenger locomotive to be built in Russia this year. Designed for a speed of 94 miles per hour, the 2000-horsepower machine carries 1470 pounds per square inch boiler pressure, a condenser being used to reduce water consumption by returning the exhaust steam to the water supply reservoir.

✣

A Train Backed Up

to let a dog cross a trestle near Auburn, N. Y., recently. Approaching the bridge, the engineer noticed a dog halfway over the span, gingerly picking its way along the ties. Rather than frighten the dog into falling from the trestle, the engineer stopped, backed his train up, and waited for the dog to reach safety before proceeding.

The Difference

THERE is this difference between a wise man and a fool; the wise man expects future things, but does not depend upon them, and in the meantime enjoys the present, remembering past with delight; but the life of the fool is wholly carried on to the future.—EPICURUS.